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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,653	03/17/2004	Heinz Eisenschmid	10191/3456	3928
26646	7590	12/22/2005	EXAMINER	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			ROGERS, DAVID A	
			ART UNIT	PAPER NUMBER
			2856	

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

78

Office Action Summary	Application No. 10/802,653	Applicant(s) EISENSCHMID ET AL.	
	Examiner David A. Rogers	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 and 12-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 11 and 20 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

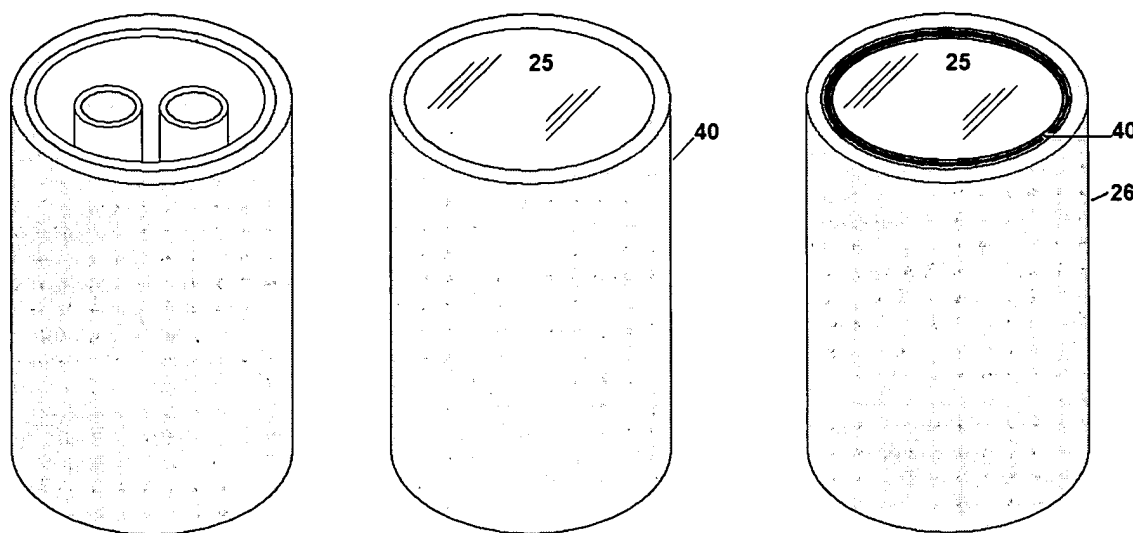
1. Applicant's election without traverse of the species of claim 5 in the reply filed on 01 December 2005 is acknowledged. Claims 6-9 and 12-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions/species, there being no allowable generic or linking claim. Claims 1-5, 11, and 20 are examined herein.

Specification

2. The disclosure is objected to because of the following informality. Claim 6 describes a sensor comprising a plurality of rods, prisms, or hollow cylinders wherein one of which is provided with an interdigital structure. The specification discloses an embodiment where a plurality of rods, prisms, or hollow cylinders are each provided with metal plating over their entire surface. See page 6, lines 1-11. The specification also discloses an embodiment comprising a single hollow cylinder with an interdigital structure. See page 7, lines 9-13. The specification does not provide for a plurality of rods, prisms, or hollow cylinders wherein at least one of which is provided with an interdigital structure. The applicant should amend either the claim (in order to be consistent with the specification) or the specification (in order to properly support the claim).

Drawings

The drawings are objected to because figures 3-7 do not reasonably convey the disclosed structure. For example, figure 3 (reference item 20) should show the wall thickness and the coating thickness as shown in the example below. The individual rods should also be shown in an enlarged view as shown in the examples below. The remaining figures should be amended accordingly.



Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the

brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 10 is objected to because of the following informality. Claim 10 is directed to a method for manufacturing a sensor which is inconsistent with claim 1 which is directed to the structure of a sensor. It is requested that claim 10 be cancelled or amended to further limit the structure of the sensor of claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5, 11, and 20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by United States Patent 6,718,819 to Schoess.

As shown in figures 2 and 3 the device of Schoess comprises a sensor (reference item 115) having a structured metal layer in the form of interdigital electrodes (reference items 137 and 139) that measures the dielectric of oil in an engine. The sensor is formed by a providing a metal structure on a nonconductive polymeric substrate (reference item 134). Official notice is hereby taken that plastics are known nonconductive polymeric materials. The sensor is a capacitive sensor that can be used to detect the dielectric value of the oil.

The sensor is provided on the inner surface of a housing (reference item 111). The system also has a base member (reference item 14) that forms a cover to fit with the housing. This combination shields the sensor against disturbances. The housing has at least one inlet to allow oil into the housing.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoess as applied to claim 1, and further in view of United States Patent Application Publication 2003/0062008 to Gramkow *et al.*

Schoess teaches the claimed invention except for a recitation of manufacturing the sensor as a molded interconnect device. Gramkow *et al.*, however, teaches the benefits of molded interconnect devices. See, for example, paragraph 0009.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Schoess with the teachings of Gramkow *et al.* to provide a sensor manufactured using molded interconnect device techniques in order to save space and materials thus making the sensor smaller.

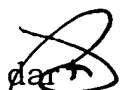
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Rogers whose telephone number is (571) 272-2205. The examiner can normally be reached on Monday - Friday (0730 - 1600).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature, possibly reading "darr", is written over the date.

13 December 2005

A handwritten signature, likely "Hezron Williams", is written above the printed name.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800